

11/22 45



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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/829,251

DATE: 02/07/2002
TIME: 11:00:51

Input Set : N:\Crf3\RULE60\09829251.raw
Output Set: N:\CRF3\02072002\I829251.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: Simmons, Laura C.
6 Yansura, Daniel G.

8 (ii) TITLE OF INVENTION: Methods and Compositions for Secretion of
9 Heterologous Proteins

11 (iii) NUMBER OF SEQUENCES: 23

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: Genentech, Inc.
15 (B) STREET: 460 Point San Bruno Blvd
16 (C) CITY: South San Francisco
17 (D) STATE: California
18 (E) COUNTRY: USA
19 (F) ZIP: 94080

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
23 (B) COMPUTER: IBM PC compatible
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
25 (D) SOFTWARE: patin (Genentech)

27 (vi) CURRENT APPLICATION DATA:

C--> 28 (A) APPLICATION NUMBER: US/09/829,251
C--> 29 (B) FILING DATE: 09-Apr-2001

30 (C) CLASSIFICATION:

32 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: 08/397,303
34 (B) FILING DATE:

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: Fitts, Renee A.
38 (B) REGISTRATION NUMBER: 35,136
39 (C) REFERENCE/DOCKET NUMBER: P889

41 (ix) TELECOMMUNICATION INFORMATION:

42 (A) TELEPHONE: 415/225-1489
43 (B) TELEFAX: 415/952-9881
44 (C) TELEX: 910/371-7168

46 (2) INFORMATION FOR SEQ ID NO: 1:

48 (i) SEQUENCE CHARACTERISTICS:

49 (A) LENGTH: 88 bases
50 (B) TYPE: nucleic acid
51 (C) STRANDEDNESS: single
52 (D) TOPOLOGY: linear

54 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

57 GCATGTCTAG AATTATGAAR AARAAYATHG CNTTYCTNCT NGCNTCNATG 50
60 TTYGTNTTYT CNATHGCTAC AAACGCGTAT GCCACTCT 88

ENTERED

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64 (2) INFORMATION FOR SEQ ID NO: 2:

66 (i) SEQUENCE CHARACTERISTICS:
67 (A) LENGTH: 36 bases
68 (B) TYPE: nucleic acid
69 (C) STRANDEDNESS: single
70 (D) TOPOLOGY: linear

72 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

75 TTCAGCACCG CACAGAGTGG CATA CGCGTT TGTAGC 36

79 (2) INFORMATION FOR SEQ ID NO: 3:

81 (i) SEQUENCE CHARACTERISTICS:
82 (A) LENGTH: 82 bases
83 (B) TYPE: nucleic acid
84 (C) STRANDEDNESS: single
85 (D) TOPOLOGY: linear

87 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

90 CTAGAATTAT GAAAAAGAAT ATCGCATTTC TTCTTGCATC TATGTTCGTT 50

93 TTTTCTATTG CTACAAACGC GTATGCCACT CT 82

97 (2) INFORMATION FOR SEQ ID NO: 4:

99 (i) SEQUENCE CHARACTERISTICS:
100 (A) LENGTH: 75 bases
101 (B) TYPE: nucleic acid
102 (C) STRANDEDNESS: single
103 (D) TOPOLOGY: linear

105 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

108 GTGGCATAACG CGTTTGATC AATAGAAAAA ACGAACATAG ATGCAAGAAG 50

111 AAATGCGATA TTCTTTCA TAATT 75

115 (2) INFORMATION FOR SEQ ID NO: 5:

117 (i) SEQUENCE CHARACTERISTICS:
118 (A) LENGTH: 67 bases
119 (B) TYPE: nucleic acid
120 (C) STRANDEDNESS: single
121 (D) TOPOLOGY: linear

123 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

126 CTAGAATTAT GAAGAAGAAT ATCGCATTTC TTCTTGCATC TATGTTCGTT 50

129 TTTTCTATTG CTACAAA 67

133 (2) INFORMATION FOR SEQ ID NO: 6:

135 (i) SEQUENCE CHARACTERISTICS:
136 (A) LENGTH: 67 bases
137 (B) TYPE: nucleic acid
138 (C) STRANDEDNESS: single
139 (D) TOPOLOGY: linear

141 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

144 CGCGTTGTA GCAATAGAAA AAACGAACAT AGATGCAAGA AGAAATGCGA 50

147 TATTCTCTT CATAATT 67

151 (2) INFORMATION FOR SEQ ID NO: 7:

153 (i) SEQUENCE CHARACTERISTICS:
154 (A) LENGTH: 79 bases
155 (B) TYPE: nucleic acid
156 (C) STRANDEDNESS: single

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157 (D) TOPOLOGY: linear
159 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
162 CGCGTATGCC CGGACACCAAG AAATGCCGT TCTGGAAAAC CGGGCTGCTC 50
165 AGGGCGATAT TACTGCACCC GGCGGTGCT 79
169 (2) INFORMATION FOR SEQ ID NO: 8:
171 (i) SEQUENCE CHARACTERISTICS:
172 (A) LENGTH: 71 bases
173 (B) TYPE: nucleic acid
174 (C) STRANDEDNESS: single
175 (D) TOPOLOGY: linear
177 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
180 CCGCCGGGTG CAGTAATATC GCCCTGAGCA GCCCGGTTTT CCAGAACAGG 50
183 CATTCTGGT GTCCGGGCAT A 71
187 (2) INFORMATION FOR SEQ ID NO: 9:
189 (i) SEQUENCE CHARACTERISTICS:
190 (A) LENGTH: 83 bases
191 (B) TYPE: nucleic acid
192 (C) STRANDEDNESS: single
193 (D) TOPOLOGY: linear
195 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
198 GCATGTCTAG ATTATGAAR AARAAYATHG CNTTCCTTCT TGCACTATG 50
201 TTCTTTTTT CTATTGCTAC AAACGCGTAT GCC 83
205 (2) INFORMATION FOR SEQ ID NO: 10:
207 (i) SEQUENCE CHARACTERISTICS:
208 (A) LENGTH: 27 bases
209 (B) TYPE: nucleic acid
210 (C) STRANDEDNESS: single
211 (D) TOPOLOGY: linear
213 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
216 AGTGGCATAC GCGTTTAG CAATAGA 27
220 (2) INFORMATION FOR SEQ ID NO: 11:
222 (i) SEQUENCE CHARACTERISTICS:
223 (A) LENGTH: 79 bases
224 (B) TYPE: nucleic acid
225 (C) STRANDEDNESS: single
226 (D) TOPOLOGY: linear
228 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
231 CTAGAGGTTG AGGTGATTAA ATGAAAAAAA ACATCGCATT TCTTCTTGCA 50
234 TCTATGTCG TTTTTCTAT TGCTACAAA 79
238 (2) INFORMATION FOR SEQ ID NO: 12:
240 (i) SEQUENCE CHARACTERISTICS:
241 (A) LENGTH: 79 bases
242 (B) TYPE: nucleic acid
243 (C) STRANDEDNESS: single
244 (D) TOPOLOGY: linear
246 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
249 CGCGTTGTA GCAATAGAAA AAACGAACAT AGATGCAAGA AGAAATGCGA 50
252 TGTTTTTTT CATAAAATCA CCTCAACT 79
256 (2) INFORMATION FOR SEQ ID NO: 13:

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258 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

264 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

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267 GAATTCAACT TCTCCATACT TTGGATAAGG AAATACAGAC ATGAAAAATC 50
270 TCATTGCTGA GTTGTATTT AAGCTTGCCC AAAAAGAAGA AGAGTCGAAT 100
273 GAACTGTGTG CGCAGGTAGA AGCTTTGGAG ATTATCGTCA CTGCAATGCT 150
276 TCGCAATATG GCGCAAAATG ACCAACAGCG GTTGTATTGAT CAGGTAGAGG 200
279 GGGCGCTGTA CGAGGTAAAG CCCGATGCCA GCATTCTGTA CGACGATACG 250
282 GAGCTGCTGC GCGATTACGT AAAGAAGTTA TTGAAGCATC CTCGTCAGTA 300
285 AAAAGTTAAT CTTTCAACA GCTGTCATAA AGTTGTACG GCCGAGACTT 350
288 ATAGTCGCTT TGTTTTATT TTTTAATGTA TTTGTAACTA GTACGCAAGT 400
291 TCACGTAAAAGGGTATCTA GAGGTTGAGG TGATTTTATG AAAAAGAATA 450
294 TCGCATTCTCT TCTTGCATCT ATGTTCGTTT TTTCTATTGC TACAAATGCC 500
297 TATGCA 506

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301 (2) INFORMATION FOR SEQ ID NO: 14:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 23 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

308 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

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310 Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe
311 1 5 10 15
313 Ser Ile Ala Thr Asn Ala Tyr Ala
314 20 23

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316 (2) INFORMATION FOR SEQ ID NO: 15:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 90 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

324 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

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327 TCTAGAGGTT GAGGTGATTT TATGAAAAAG AATATCGCAT TTCTTCTTGC 50
330 ATCTATGTTC GTTTTTCTA TTGCTACAAA YGCSTATGCM 90

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334 (2) INFORMATION FOR SEQ ID NO: 16:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

342 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

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345 TCTAGAATTA TGAAAAAGAA TATCGCATT CTTCTTGCAT CTATGTTCGT 50
348 TTTTCTATT GCTACAAACG CGTATGCM 78

```

352 (2) INFORMATION FOR SEQ ID NO: 17:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 bases
- (B) TYPE: nucleic acid

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357      (C) STRANDEDNESS: double
358      (D) TOPOLOGY: linear
360      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
363 TCTAGAATTA TGAAGAAGAA TATTGCGTTC CTACTTGCT CTATGTTGT 50
366 CTTTTCTATA GCTACAAACG CGTATGCM 78
370 (2) INFORMATION FOR SEQ ID NO: 18:
372      (i) SEQUENCE CHARACTERISTICS:
373          (A) LENGTH: 78 bases
374          (B) TYPE: nucleic acid
375          (C) STRANDEDNESS: double
376          (D) TOPOLOGY: linear
378      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
381 TCTAGAATTA TGAAGAAGAA TATCGCATT TCTCTTGCAT CTATGTTCGT 50
384 TTTTTCTATT GCTACAAACG CGTATGCM 78
388 (2) INFORMATION FOR SEQ ID NO: 19:
390      (i) SEQUENCE CHARACTERISTICS:
391          (A) LENGTH: 78 bases
392          (B) TYPE: nucleic acid
393          (C) STRANDEDNESS: double
394          (D) TOPOLOGY: linear
396      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
399 TCTAGAATTA TGAAAAAAA CATCGCATT TCTCTTGCAT CTATGTTCGT 50
402 TTTTTCTATT GCTACAAACG CGTATGCM 78
406 (2) INFORMATION FOR SEQ ID NO: 20:
408      (i) SEQUENCE CHARACTERISTICS:
409          (A) LENGTH: 78 bases
410          (B) TYPE: nucleic acid
411          (C) STRANDEDNESS: double
412          (D) TOPOLOGY: linear
414      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
417 TCTAGAATTA TGAAAAAAA CATTGCCATT CTTCTTGCAT CTATGTTCGT 50
420 TTTTTCTATT GCTACAAACG CGTATGCM 78
424 (2) INFORMATION FOR SEQ ID NO: 21:
426      (i) SEQUENCE CHARACTERISTICS:
427          (A) LENGTH: 78 bases
428          (B) TYPE: nucleic acid
429          (C) STRANDEDNESS: double
430          (D) TOPOLOGY: linear
432      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
435 TCTAGAATTA TGAAGAAAAA CATCGCTTT CTTCTTGCAT CTATGTTCGT 50
438 TTTTTCTATT GCTACAAACG CGTATGCM 78
442 (2) INFORMATION FOR SEQ ID NO: 22:
444      (i) SEQUENCE CHARACTERISTICS:
445          (A) LENGTH: 78 bases
446          (B) TYPE: nucleic acid
447          (C) STRANDEDNESS: double
448          (D) TOPOLOGY: linear
450      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
453 TCTAGAATTA TGAAAAGAA CATAGCGTTT CTTCTTGCAT CTATGTTCGT 50

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/829,251

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TIME: 11:00:52

Input Set : N:\Crf3\RULE60\09829251.raw

Output Set: N:\CRF3\02072002\I829251.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]